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Who is Creating the Most Friction?

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Students Name: _____ Date: _____

WHO IS CREATING THE MOST FRICTION?

Dear Family Partner:

We are learning about forces in science. This activity increases my understanding of one type of force called friction. I hope you enjoy this activity with me. This activity is due on _____

Sincerely,

Student Signature

OBJECTIVE:

To see what household items create the most friction.

MATERIALS:

- One ramp (make with a piece of cardboard (like a cereal box), the side of a plastic binder, a flat piece of wood, or anything that would a ramp)
- A pen or pencil.
- Plastic wrap or an old plastic bag and tape.
- Four household items that can be slid down the ramp.

PROCEDURE:

1. Gather all of the materials together. The student should select 2 household items to slide down the ramp and the family partner should select 2 items to slide down the ramp. Identify each of your household items as item 1, 2, 3 or 4 and list them below.
Item 1 _____
Item 2 _____
Item 3 _____
Item 4 _____
2. Hold the ramp up so that it is the height of one hand (5-6 inches).
3. Separately slide each of the 4 objects down the ramp.
4. Record Results
 - a. Which object slid down the fastest? _____
 - b. Which object slid down the slowest? _____

5. In an effort to reduce friction cover the ramp with plastic wrap or tape a plastic bag over the ramp.
6. Separately slide each object down the ramp again.
7. Record Results
 - a. Which object slid down the fastest?

 - b. Which object slid down the slowest?

 - c. Did item 1 slide down faster this time?

 - d. Did item 2 slide down faster this time?

 - e. Did item 3 slide down faster this time?

 - f. Did item 4 slide down faster this time?

CONCLUSION:

8. Were you surprised by the item that slid the fastest?

9. Did the plastic actually create less friction? Why or Why not?

10. Think of an item that you did not test that you predict would slide very slowly.
What is it?

HOME-TO-SCHOOL COMMUNICATION:

Dear Family Member,

Please give me your reactions to your Childs work on this activity. Write YES or NO for each statement.

_____ 1. My child understood the homework and was able to complete it.

_____ 2. My child and I enjoyed the activity.

_____ 3. This assignment helped me know what my child is learning in Science.

Any Other Comments: _____

Parent's Signature _____ Date: _____